

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings, of claims in this application.

1. (Previously presented) A surgical access port for insertion into a body cavity, comprising:

an elongate tubular body extending along an axis between a proximal end and a distal end, the elongate tubular body having a lumen extending between the proximal end and the distal end; and

a tissue penetrating tip connected to and disposed at the distal end of the tubular body for penetrating through a body wall and into the body cavity, the tip in a first, penetrating position, blocks the lumen of the elongate body;

wherein the tip swings from the first, penetrating position to a second, retaining position, the tip swinging away from the elongate body unblocking the lumen of the elongate body, when the body wall has been traversed.

2. (Original) The surgical access port of Claim 1, further comprising a seal housing operably connected to the proximal end of the tubular body, the seal housing having an access port providing an opening into the tubular body to allow passage of surgical instruments.

3. (Original) The surgical access port of Claim 1, wherein the tip is sharp, pointed or bladed.

4. (Original) The surgical access port of Claim 1, wherein the tip is substantially blunt or has a conical surface.

5. (Withdrawn) The surgical access port of Claim 1, further comprising a retention member for connecting the tubular body and the tip.

6. (Previously presented) A surgical access port for insertion into a body cavity, comprising:

an elongate tubular body extending along an axis between a proximal end and a distal end; and

a tissue penetrating tip disposed at the distal end of the tubular body for penetrating through a body wall and into the body cavity,
wherein the tip moves from a first, penetrating position to a second, retaining position,
wherein the tip is generally conical and repositions to one side of the tubular body in the second, retaining position.

7. (Withdrawn) The surgical access port of Claim 1, wherein the tip comprises at least two or more parts or petals that reposition to the side of the tubular body in the second, retaining position.

8. (Original) The surgical access port of Claim 1, wherein the tip repositions to one side of the tubular body when no axial load is present to hold it in axial alignment with the tubular body.

9. (Original) The surgical access port of Claim 6, wherein the repositioned tip remains in an off-axis condition until removal of the access port.

10. (Original) The surgical access port of Claim 6, wherein the repositioned tip remains in a substantially right-angled condition.

11. (Original) The surgical access port of Claim 6, wherein the tip automatically realigns with the axis of the tubular body as the access port is withdrawn from the body wall.

12. (Original) The surgical access port of Claim 1, wherein the tubular body is a thin walled tube sized and configured to allow passage of surgical instruments through the body wall and into the body cavity.

13. (Original) The surgical access port of Claim 1, wherein the tip comprises a conical, tapered or rounded shape to separate tissue layers and to provide a small fascial defect through which the tubular body can pass.

14. (Withdrawn) The surgical access port of Claim 1, wherein the tip is solid or hollow.

15. (Withdrawn) The surgical access port of Claim 14, wherein the hollow tip is conical and operates as a specimen bag by closing on a specimen during removal of the access port.

16. (Original) The surgical access port of Claim 1, wherein at least one of the tubular body and tip is formed from an optically clear material.

17. (Withdrawn) The surgical access port of Claim 5, wherein the retention member is formed from metal or plastic.

18. (Withdrawn) The surgical access port of Claim 5, wherein the retention member operably connects with a sidewall of the tubular body.

19. (Withdrawn) The surgical access port of Claim 5, wherein the retention member is biased to hold the tip in an off-axis position when there is no axial load.

20. (Withdrawn) The surgical access port of Claim 5, wherein the retention member is lightly held in axial alignment and subsequently deflected in the presence of an instrument within the tubular body.

21. (Withdrawn) The surgical access port of Claim 5, wherein the retention member is one of a spring, a spring wire, an offset hinge or a "living" hinge.

22. (Withdrawn) The surgical access port of Claim 5, wherein the retention member is formed from a substantially flat ribbon of metal.

23-24. (Canceled)

25. (Original) The surgical access port of Claim 4, wherein the conical surface facilitates insertion of the access port with a reduced penetration force and minimizes tenting of the body wall.

26. (Original) The surgical access port of Claim 4, wherein the conical surface facilitates separation of different layers of the body wall and provides proper alignment of the tip between the layers.

27-35. (Canceled)

36. (Withdrawn) The surgical access port of claim 1 wherein the tip has a rounded centering portion extending from a proximal end of the tip and into the distal end of the elongate tubular body.

37. (Withdrawn) The surgical access port of claim 36 wherein a circumference of the rounded centering portion is equal to an inner circumference of the elongate tubular body.

38. (Withdrawn) The surgical access port of claim 5 wherein the tip has a plurality of proximally facing extensions dimensioned to fit into distally facing slots outlining an outer periphery of the tubular body.

39. (Withdrawn) The surgical access port of claim 38 wherein the retention member is fitted into the wall of the elongate tubular body and extends into the tip on one side of the tip that opposes the one of the plurality of proximally facing extensions and a remaining plurality of proximally facing extensions positioned therebetween.

40. (Previously presented) The surgical access port of claim 1 wherein the tip in the first, penetrating position blocks passage of an opening at the distal end of the elongate tubular body preventing passage of surgical instruments through the elongate tubular body.

41. (Previously presented) The surgical access port of claim 40 wherein the tip in the second, retaining position, unblocks passage of the opening at the distal end of the elongate tubular body allowing passage of surgical instruments through and out the tubular body.

42. (Previously presented) The surgical access port of claim 1 wherein the tip is a non-expanding tip.

43. (Previously presented) The surgical access port of claim 1 wherein the tip is a non-compressible tip.

44. (Previously presented) A surgical access port for insertion into a body cavity, comprising:

an elongate tubular body extending along an axis between a proximal end and a distal end, the elongate tubular body having a lumen extending between the proximal end and the distal end; and

a tip connected to and disposed at the distal end of the tubular body for penetrating through a body wall and into the body cavity, the tip in a first, penetrating position, blocks the lumen of the elongate body;

wherein the tip swings from the first, penetrating position to a second, retaining position, the tip swinging away from the elongate body unblocking the lumen of the elongate body, when the body wall has been traversed, and

wherein the tip is a single-piece tip.

45. (New) A surgical access port comprising:

a longitudinal axis;

an instrument access channel extending from a proximal and to a distal end thereof and substantially aligned with the longitudinal axis;

an elongate tubular body comprising a lumen through which the instrument access channel extends, the tubular body dimensioned for traversing a body wall into a body cavity;

a seal housing disposed at a proximal end of the tubular body;

a blunt, tissue penetrating tip; and

a retention member coupling the tip to a distal end of the tubular body,

wherein

the access port has a first configuration in which the tissue penetrating tip is substantially aligned with the longitudinal axis and substantially blocks the instrument access channel,

the access port has a second configuration in which the tissue penetrating tip is not aligned with the longitudinal axis and does not block an instrument access channel,

advancing the access port through tissue maintains the access port in the first configuration, and

the retention member biases the tip in the second configuration.

46. (New) The surgical access port of claim 45, wherein the tissue penetrating tip separates tissue on advancement therethrough.

47. (New) The surgical access port of claim 45, wherein the tissue penetrating tip is substantially frustoconical.

48. (New) The surgical access port of claim 45, wherein the tissue penetrating tip comprises a plurality of parts or petals.

49. (New) The surgical access port of claim 45, wherein the tissue penetrating tip comprises a transparent material.

49. (New) The surgical access port of claim 45, wherein the retention member comprises at least one of a spring, spring wire, offset hinge, and a living hinge.